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ORIGINAL ARTICLES

Knowledge, attitudes and practices among pregnant women on intermittent presumptive therapy in Guruve District, Zimbabwe

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Abstract

Objective: To determine knowledge, attitudes and practices on intermittent presumptive therapy among pregnant women.
Design: A descriptive survey design.
Setting: A rural district in Zimbabwe in a Malaria endemic area lying in the Zambezi valley.
Subjects: A convenience sample of forty pregnant women living in Guruve District and on the intermittent Presumptive Therapy (IPI) programme. There were no drop outs.
Main Outcome Measures: Selected indicators of knowledge, attitudes and practices were analyzed using descriptive statistics.
Results: The principal results were that the majority of the respondents (67) had knowledge about the Intermittent Presumptive Therapy (IPT) but (67%) lacked awareness of the benefits of the programme activities. Seventy respondents (43%) said that information about the programme was not readily available. Eleven (27.5%) believed that drugs used in IPI programme could cause fatal congenital abnormalities. All the respondents (100%) believed that malaria could be prevented. Twenty-nine (72.5%) took drugs for IPI accurately under supervision by the nurse and eleven (27.5%) took drugs incorrectly.
Conclusion: Drug compliance improves if drugs are taken under direct supervision. The results revealed that the majority was knowledgeable of the existence of the IPT, but were not aware of the benefits. There was also a problem of information dissemination leading to ignorance, and myths and misconceptions. Therefore, health education and promotion has to be intensified to give accurate information and motivation.

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Introduction

The purpose of this study was to determine knowledge, attitudes and practices among pregnant women on Intermittent Presumptive Therapy in Guruve District. This district lies along the Zambezi valley which is a malaria endemic area where forty-five percent of maternal deaths are due to malaria[1]. Furthermore, some deaths are due to severe aneamia associated with malaria.

Intermittent Presumptive Therapy refers to the use of anti-malarial drugs given in treatment doses at predetermined intervals after quickening.[2] Malaria is a parasitic disease transmitted through the bite of an infected female, anopheles mosquito. Malaria endemic areas have malaria all year round. The pregnant women in the malaria endemic area are given Intermittent Presumptive Therapy (IPT) as a prophylaxis measure. The problem noted was that, despite the prophylaxis measure, maternal deaths due to malaria and associated problems still occurred. It seemed as if the pregnant women did not have knowledge of the malaria prophylaxis drugs and had negative attitudes and practices. Thus the investigator wanted to find out the knowledge possessed by these women, their attitudes and practices on Intermittent Presumptive Therapy. The assumptions made were that: all pregnant women in Guruve District attending antenatal clinics were on Intermittent Presumptive Therapy; that IPT was being practiced and information was being disseminated to pregnant women in the district through health education by health workers. The following were used as indicators of knowledge, attitudes and practices. Knowledge, indicators were, knowledge of IPT programme, benefits, drug regimen and drugs used. Attitudes indicators were taboos and myths such as beliefs that malaria could cause abortions, anti-malarials do not protect from malaria, whether malaria can be prevented and belief that anti-malarials cause congenital deformities. On practices, the indicators were compliance to drug taking and taking of the correct drugs.

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Materials and Methods

Study subjects were pregnant women attending Guruve District Hospital and Mahuwe Clinic who were on IPT programme. They were selected using the convenience sampling technique in one month during week days. A sample size of forty pregnant women was determined by power analysis guided by an effect size of 0.5 to the power of 0.8 and a power calculation chart by Lipsey and Mark (1990). A pre-coded structured interview schedule in the vernacular language was administered. Knowledge attitudes and practices were assessed using closed and open-ended questions on the following indicators: knowledge of type of programme, benefits, drugs used and drug regimen: on attitudes: beliefs that malaria cause abortions and congenital abnormalities from anti-malarials and drugs not offering protection from malaria. On practices, compliance on drug regimen and taking of correct drugs. The responses were coded and data were analysed manually using the data matrix and descriptive statistics. Results were presented using frequency tables.

Ethics.

Permission to carry out the study was obtained from the Medical Research Board and from the District Medical Officer. All respondents gave written informed consent before being interviewed in a private room for confidentiality between 0800 and 10 hours while waiting for doctors consultation. This was done to avoid delaying the respondents returning home. Collected data were recorded on the individual interview forms without initials, names and hospital numbers, but item numbers only. These forms were kept under lock and key.

Results

Knowledge, attitudes and practices

Table 1 shows the indicators that were used to assess, attitudes and practices on Intermittent Presumptive Therapy. Indicators for knowledge levels were type of programme, benefits, drugs regimen and type of drug used. On attitudes indicators were belief on anti-malaria could cause abortions, that malaria could be prevented in pregnancy, IPT does not protect pregnant mothers from malaria and belief that anti-malarials could cause congenital deformities. On practice indicators, were taking IPT drugs correctly under direct supervision and taking the correct IPT drugs.

Table I: Attitudes to IPT.

(N=40)

Indicator	Percentage
Malaria prohylaxis causes abortion	90.0%
IPT does not protect from malaria	77.5%
Malaria in pregnancy can be prevented by IPT	100.0%
Malaria prophylaxis can cause deformities to the unborn baby	27.5%

On knowledge of IPT programme, 67 knew that IPT was for malaria prophylaxis, twenty-seven (67.5%) were not aware of benefits of IPT. Twenty-four (60%) knew the name of the drug used and twenty-one (52) were taking the drug according to drug regimen. Table 1 reveals that thirty-six (90%) believed that malaria prophylaxis could cause abortions. Thirty-one (77.5%) believed that IPT does protect pregnant mothers from malaria. The respondents (100%) believed that malaria in pregnancy could be prevented. On the belief that IPT can cause deformities to the unborn child 27.5% believed this. On practices, the study revealed that twenty-nine (72.5%) took the IPT drugs correctly under direct supervision by the nurse and eleven (27.5%) took the drugs incorrectly. Twenty-six (65%) were taking the correct drug for IPT while fourteen (35%) were still taking the absolete regime of chloroquine and fansidar, (S-P).

Figure I: Knowledge of type of programme (IPT).

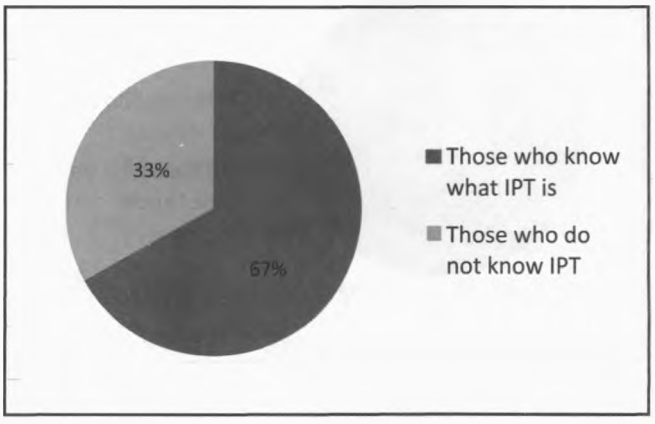


Figure II: Knowledge of IPT benefits.

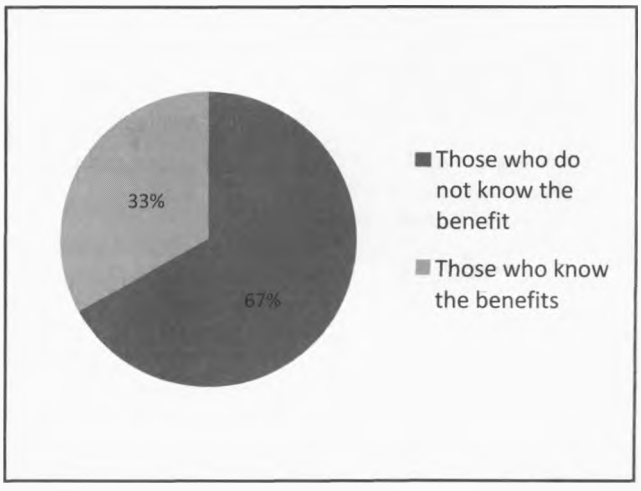


Figure III: Knowledge of malaria prophylaxis regimen.

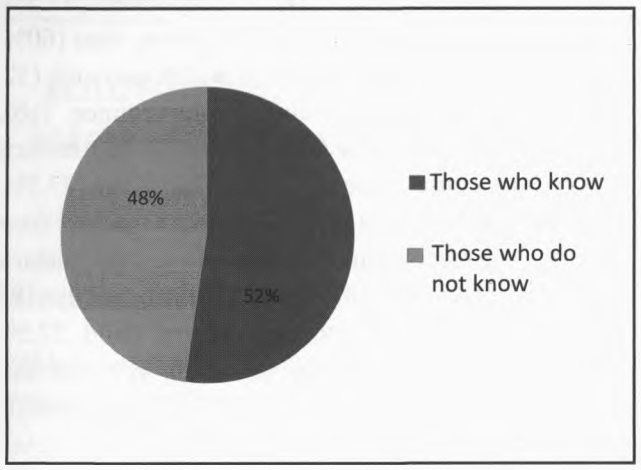


Figure IV: Knowledge of drugs used for IPT.

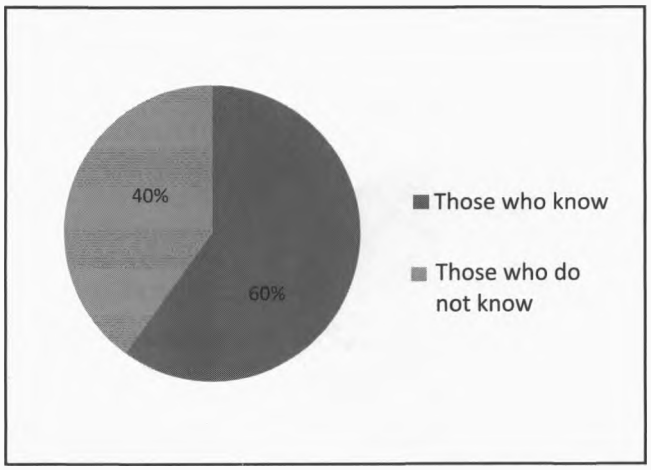


Figure V: Availability of IPT information sources.

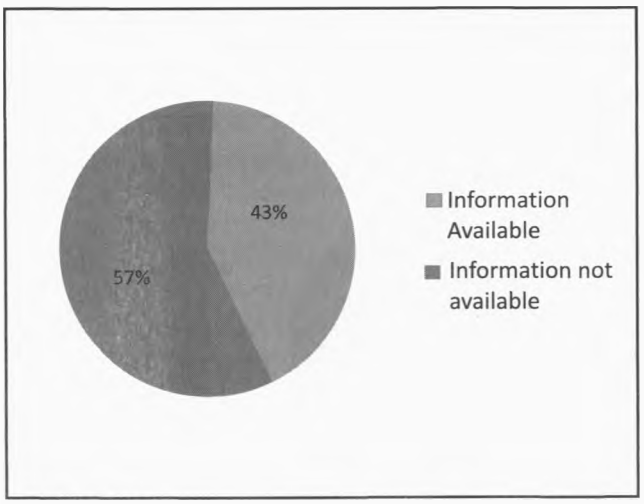


Figure VI: Practices on how IPT drugs are taken.

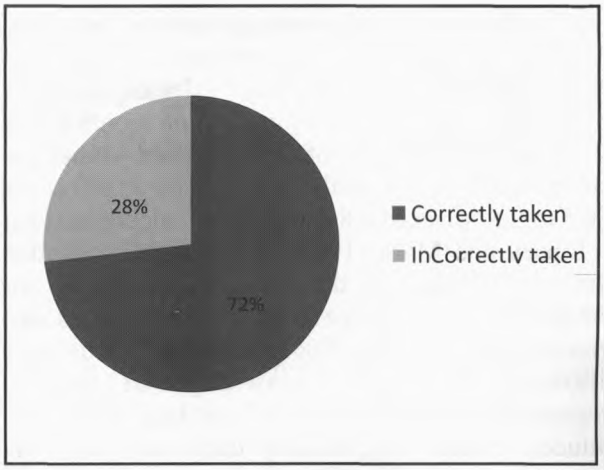
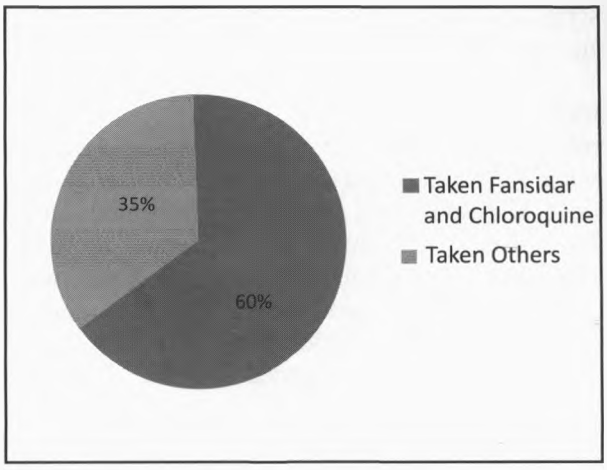


Figure VII: Practices on type of drugs taken.



Discussion

The major findings on knowledge were that the respondents majority (67) were knowledgeable about the IPT as a programme for malaria prevention. However, still the majority (67.5%) was not aware of the benefits of the IPT programme. According to the Health Belief model (year) if people do not see the perceived benefits they do not comply. This revealed the need for health education intensification to address this issue. These findings also proved that pregnant women in the district were on IPT programmes as investigator was able to find subjects on the IPT programme and for further researches.

On attitudes, the respondents (100%) agreed that malaria in pregnancy could be prevented. This was a good entry point for our health education and to emphasize the benefits of a malaria free pregnancy. This can motivate the respondents to comply to IPT. The respondents also believed that IPT caused congenital abnormalities. These attitudes can influence

respondents not to take malaria prophylaxis (IPT) leading to maternal and infant morbidity and mortalities, even if someone is on the programme. Therefore, health education should be targeted on dispelling myths and misconceptions of these respondents as IPT regimen does not cause abortions. The assumption that IPT is accepted throughout the district by the pregnant women was proved wrong as some were not in the programme.

On the issue of practices, the findings revealed that only twenty-nine (72.5%) were taking the drugs correctly under direct supervision by a nurse. Twenty-nine (72.5%) were taking the correct drugs. It was dismaying to find out that eleven (27.5%) were taking the wrong tablets and also carrying them home. Carrying the drugs home could affect compliance if self-care knowledge is deficient. The study also revealed that some clinics were still practising old regimens of IPT by giving absolete drug regimens of IPT. This could increase maternal and infant mortality. Thus the assumption that IPT was being practiced correctly throughout the district was proved wrong.

Conclusion

The major conclusion deduced from the study were as follows: there was an IPT programme in the district and (72.5%) were on the correct drug regimen and supervision as recommended. This revealed that implementation of the new health policy had been taken up. The remainder taking incorrect drugs at home need to be captured and given correct information, as maternal and infant death is always a tragedy. Efforts should be made to avail all pregnant mothers with information of IPT to prevent death from malaria. Intermittent Presumptive Therapy information and dispelling of myths and misconceptions on congenital malformations and abortions should be stepped up. There is also a need to strengthen health education and avail workshops for health workers to update their knowledge on IPT.

Acknowledgements

Dr Chiguvare (DMO) for allowing us to carry out the study at Guruve hospital.

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